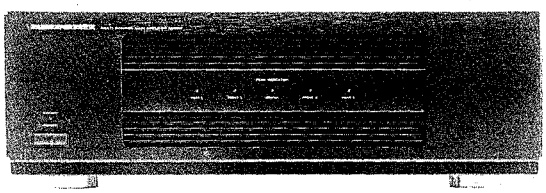
Service Manual

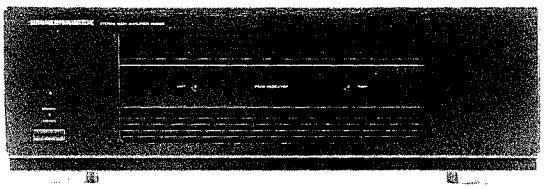
74MM500 /02B / 02G / 05B
74SM500 /02B / 02G / 05B

Main amplifier

Multi channel main amprifier MM500



Stereo main amprifier SM500



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4822 725 51074

marantz®

model MM500 / SM500

First issue : 1994/9
PCS 79 583

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound. Only **original MARANTZ parts** can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available at our National Marantz Subsidiary or Agent.

MARANTZ EUROPE B.V.
P.O. Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands
Phone : +31-40-732241
Fax : +31-40-735578

ORDERING PARTS

Parts can be ordered either by mail or by telex. In both cases, the correct part number has to be specified. The following information must be supplied to eliminate delays in processing your order:

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which the part is required
5. Way of shipment
6. Signature: any order form or telex must be signed, otherwise such part order will be considered as null and void.

ADDRESSES

AUSTRALIA
MARANTZ AUSTRALIA
Figtree Drive
Australia Centre
Homebush, NSW 2140
AUSTRALIA

AUSTRIA
MARANTZ
Hietzinger Kai 137a
1130 Wien
Austria

BELGIUM
MARANTZ EUROPE B.V.
Div. Benelux
P.O.Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands

CHILE
MARANTZ DIVISION OF
PHILIPS S.A.
Av.Santa Maria 0760
Casilla 2687
Santiago
Chile

DENMARK
MARANTZ
Horsvinget 5
2630 Tastrup
Denmark

FINLAND
MARANTZ
Kuortanegatan 1
00520
Helsingfors 52
Finland

FRANCE
MARANTZ FRANCE
4 Rue Bernard Palissy
92600 Asnières
France

GERMANY
MARANTZ GERMANY GmbH
Kleine Heide 12
Postfach 4802
Halle-Westfalen
Germany

GREAT BRITAIN
MARANTZ HiFi UK Ltd.
Kingsbridge House
Padbury Oaks
575-583 Bath Road
Longford Middlesex UB7 OEH,
U.K.

GREECE
ADAMCO ELECTR. SA
P.O.Box 21025
Hippocratus Str. 188
Athens 11471
Greece

ITALY
MARANTZ ITALIANA SPA
Piazza IV Novembre 3
20124 Milano
Italy

JAPAN
MARANTZ JAPAN INC.
35-1, 7-chome, Sagamiono
Sagamihara-shi, Kanagawa
Japan

KUWAIT
AL ALAMIAH ELECTRONICS
P.O.Box 8196
Salmiah
22052 Kuwait

NETHERLANDS
MARANTZ EUROPE B.V.
Div. Benelux
P.O.Box 80002
Building SFF 2
5600 JB Eindhoven
The Netherlands

NORWAY
MARANTZ
Postboks 7034
Assiden
3007 Drammen
Norway

PORTUGAL
COREL
Av. da Liberdade
211-2 Esq.
1200 Lisboa
Portugal

SAUDI ARABIA
AL ALAMIAH ELECTRONICS
P.O.Box 5954
University Street
Riyadh 11432
Saudi Arabia

SOUTH AFRICA
MARANTZ S.A.
10 Bond Street
Randburg 2194
P.O. Box 7703
Johannesburg 2000
South Africa

SPAIN
MARANTZ SPAIN
Martinez Villergas 2
Apartado 2065
Madrid 28027
Spain

SWEDEN
MARANTZ
Box 1324
17125 Solna
Sweden

SWITZERLAND
MARANTZ SWITZERLAND
Postfach
8010 Zürich-Müllingen
Switzerland

TRADING
MARANTZ TRADING
P.O.Box 20008
Building SFF 2
5600 JB Eindhoven
The Netherlands

All of the above locations are fully equipped to take care of your total service needs or can advice you. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

Model SM500

Rated Power Output ..... 80 W rms / ch. into 8 ohms
130 W rms / ch. into 4 ohms

Total Harmonic Distortion ..... < 0.05 % at 8 ohms
< 0.09 % at 4 ohms

Input sensitivity / input impedance ..... 0.5 V rms / 25 k ohms

Frequiency Response (-1 dB at 1 W) ..... 10 to 80 kHz

Signal to Noise ratio (A-weighted) ..... > 110 dB

Model MM500

Rated Power Output

- Front ..... 75 W rms / ch. into 8 ohms
- Center ..... 80 W rms at 1 kHz into 8 ohms
- Rear ..... 40 W rms / ch. at 1 kHz into 4 ohms

Total Harmonic Distortion ..... < 0.09 % at 8 ohms

Input Sensitivity / inpedance ..... 0.5 V rms / 2.5 k ohms

Frequency Responcse (-1 dB at 1W) ..... 10 to 80 kHz

Signal to Noise ratio (A-weight) ..... > 110 dB

Power Requirement

- / 02. version ..... 230 V AC 50 Hz
- / KS version ..... 230 V AC 50 Hz
- K version ..... 110 / 220 V AC 50 / 60 Hz
- U version ..... 120 V AC 60Hz

Dimensions

- width ..... 426 mm
- Hight ..... 145 mm
- Dipth ..... 356 mm

Weight : SM 500 ..... 9.3 kg
MM500 ..... 9.4 kg

Supplied accessory ..... Remote cable x 1

Design and Specifications subject to change without prior notice.

2. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing.

Item	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
ACVTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble Shooting
DCVTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer	Adjust level of primary power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

3. IDLING CURRENT ADJUSTMENT

MM500

(1) Before switching the power ON, insert the short plug in the inputs terminals (L CH / R CH). Then, rotate the semi-fixed resistors R719 (L CH) and R720 (R CH) on the PC board PV04 fully counterclockwise.

(2) Connect a digital voltmeter, set for the DC voltage input to the pertinent test points (the marked ones of R737-R738) on the PC board PV04. (Positive: Left side, Negative: Right side)

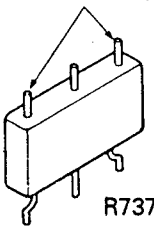
(3) After the completion of the above setup.
Switch the power ON and adjust the semi-fixed resistors R719 (L CH) and R720 (R CH) on the PC board PV04 according to the reading of the digital voltmeter. The setting values are 7 mV (19 mA) of the both channels.

Please refer to the table below.

Power ON

30 sec. ~ 1 min.	4 mV
1 ~ 2 min. Later	5 mV
More than 5 min.	7 mV

Measurement point



R737/R738

SM500

(1) Before switching the power ON, insert the short plug in the inputs terminals (L CH / R CH). Then, rotate the semi-fixed resistors R719 (L CH) and R720 (R CH) on the PC board PV04 fully counterclockwise.

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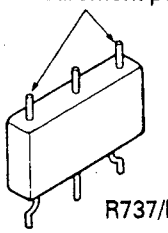
Please refer to the table below.

Power ON

30 sec. ~ 1 min.	4 mV
1 ~ 2 min. Later	5 mV
More than 5 min.	8 mV

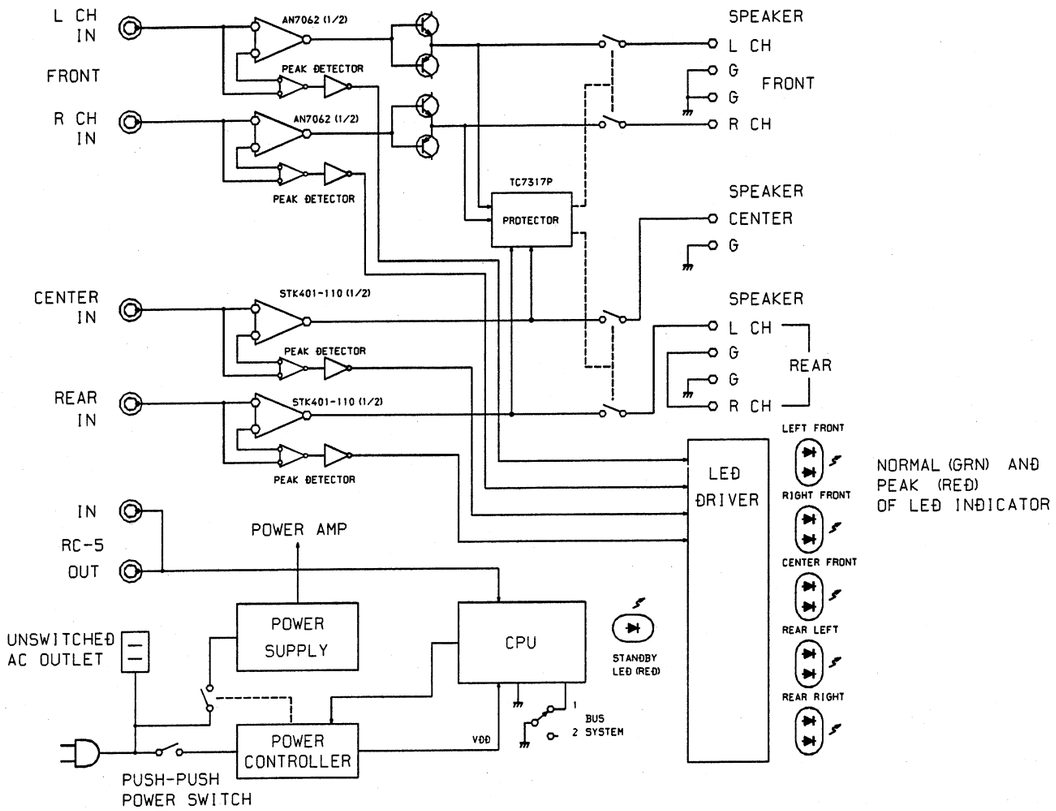
Measurement point



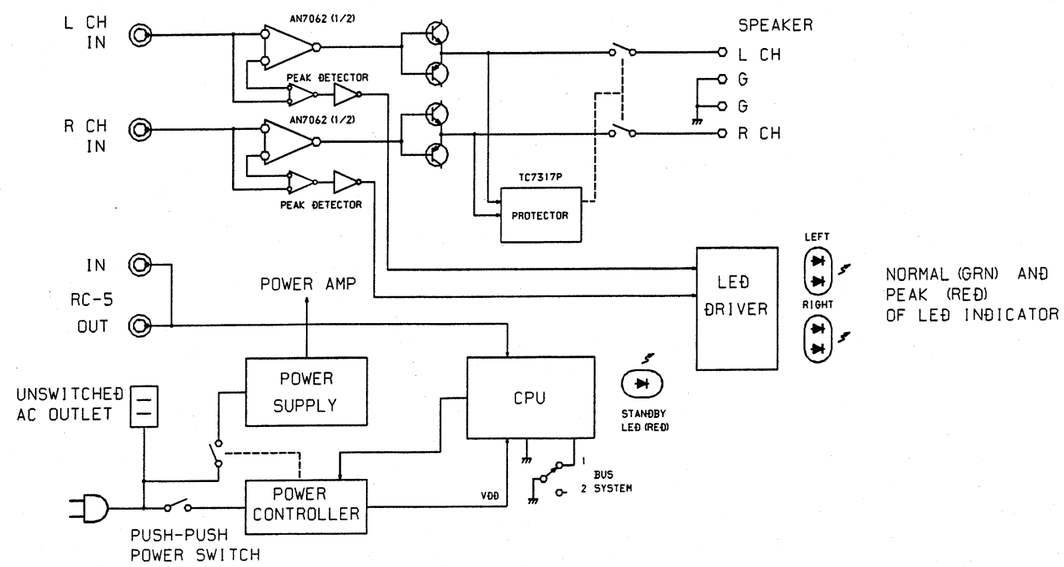
R737/R738

4. BLOCK DIAGRAM

MM500



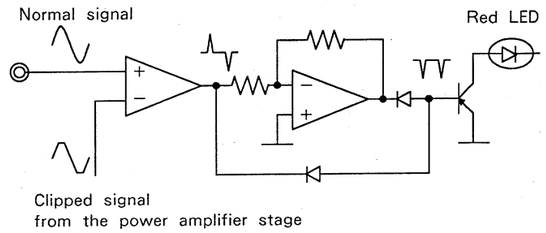
SM500



5. CIRCUIT DESCRIPTION

THE PRINCIPLE OF PEAK INDICATOR

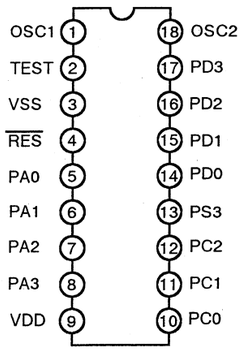
When distortion in the channel power output which causes clipping is over 1%, the red indicator lights up as the following circuit diagram.



A principle of peak indicator

When the output power in the power amplifier is at the non - clipped level or no signal output, the green indicator lights up.

● PIN ASSIGNMENT TABLE



QU01
LC6527F-4D98

PIN NO.	PORT NAME	I/O	ACT	FUNCTION
1	OSC1	I	–	4.00MHz
2	TEST	–	–	GND
3	VSS	–	–	GND
4	$\overline{RES}$	I	L	REST
5	PA0	–	–	GND
6	PA1	–	–	GND
7	PA2	–	–	GND
8	PA3	–	–	GND
9	VDD	–	–	+ 5V
10	PC0	I	L	RC-5 INPUT
11	PC1	O	L	POWER ON
12	PC2	O	L	STAND BY LED
13	PC3	O	–	RC-5 RECEIVE LED (NOT USED)
14	PD0	O	H	STAND BY OUT (NOT USED)
15	PD1	I	–	5V
16	PD2	I	L	LOW : *SYSTEM1 HIGH : **SYSTEM2
17	PD3	I	–	GND
18	OSC2	I	–	4.00MHz

NOTE;

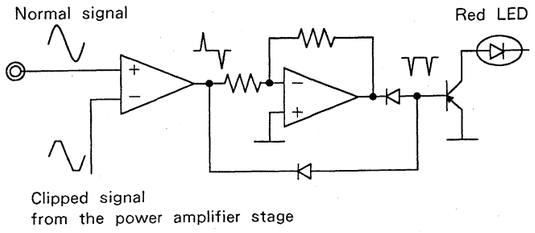
1)*SYSTEM1 is for the Remote Controler with Power SW(ex. Moedl AV500, etc.).
2)SYSTEM2 is for the Remote Controler that turns on the Power by Power SW (ex. Model AC500 or EC500, etc.).**

◆ BUS SYSTEM (SYSTEM1/SYSTEM2)SW is on the Rea panel.

5. CIRCUIT DESCRIPTION

THE PRINCIPLE OF PEAK INDICATOR

When distortion in the channel power output which causes clipping is over 1%, the red indicator lights up as the following circuit diagram.

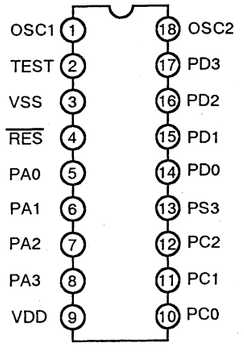


A principle of peak indicator

NORMAL (GRN) AND
PEAK (RED)
OF LED INDICATOR

When the output power in the power amplifier is at the non - clipped level or no signal output, the green indicator lights up.

● PIN ASSIGNMENT TABLE



QU01
LC6527F-4D98

PIN NO.	PORT NAME	I/O	ACT	FUNCTION
1	OSC1	I	–	4.00MHz
2	TEST	I	–	GND
3	VSS	–	–	GND
4	$\overline{RES}$	I	L	REST
5	PA0	–	–	GND
6	PA1	–	–	GND
7	PA2	–	–	GND
8	PA3	–	–	GND
9	VDD	–	–	+ 5V
10	PC0	I	L	RC-5 INPUT
11	PC1	O	L	POWER ON
12	PC2	O	L	STAND BY LED
13	PC3	O	–	RC-5 RECEIVE LED (NOT USED)
14	PD0	O	H	STAND BY OUT (NOT USED)
15	PD1	I	–	5V
16	PD2	I	L	LOW : *SYSTEM1 HIGH : **SYSTEM2
17	PD3	I	–	GND
18	OSC2	I	–	4.00MHz

NORMAL (GRN) AND
PEAK (RED)
OF LED INDICATOR

NOTE;

1)*SYSTEM1 is for the Remote Controler with Power SW(ex. Moedl AV500, etc.).

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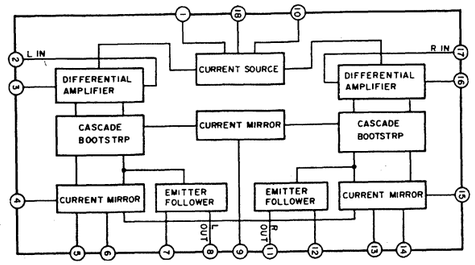
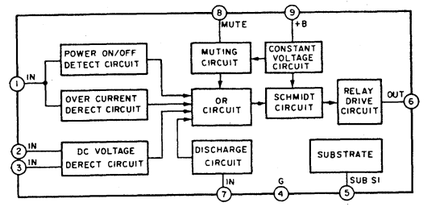
◆ BUS SYSTEM (SYSTEM1/SYSTEM2)SW is on the Rea panel.

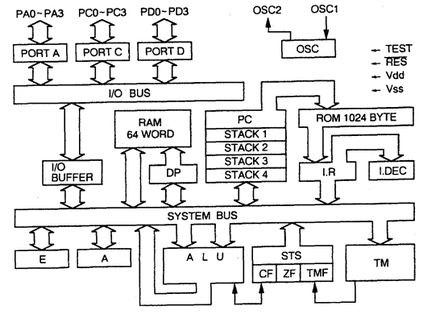
Q715 : AN7062N



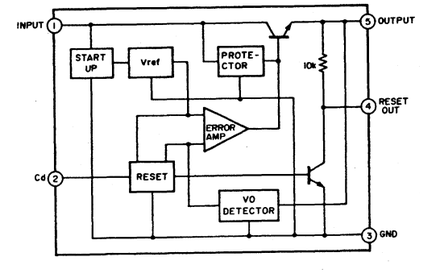
QN06 : TA7317P



QU01 : LC6527F-4D98

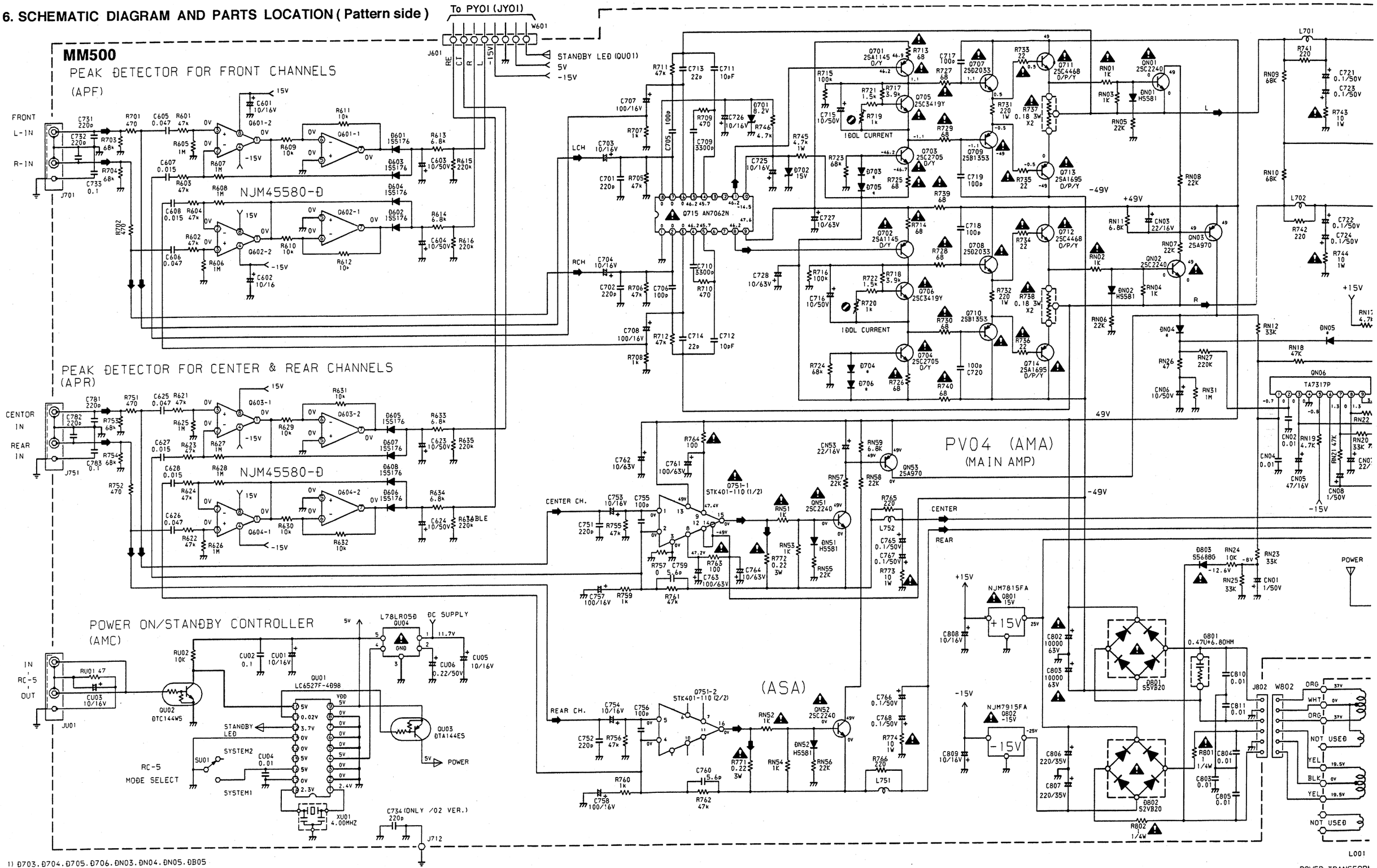


QU04 : L78LR05D



PCS 79 587
MARA-00654 / DRUCK 2

6. SCHEMATIC DIAGRAM AND PARTS LOCATION (Pattern side)



1) Ð703. Ð704. Ð705. Ð706. ÐN03. ÐN04. ÐN05. ÐB05
Ð601. Ð602. Ð603. Ð604. Ð605. Ð606. Ð607. Ð608
1SS176 OR MA165 OR 1SS254

2) QB01. QN72 VR=30V 0.1A
2SC5336SP OR 2SC2458 OR 2SC3311 OR 2SC1740S

3) QY01 - QY08 VR=-30V -0.1A
2SA1408 OR 2SA1309A OR 2SA933 OR 2SA608SP

STANDBY LED (QU01)
5V
-15V

PV04 (AMA)
(MAIN AMP)

(ASA)

ENTER CH.
REAR CH.
LCH
RCH
CENTER
REAR

Q715 AN7062N
Q751-1 STK401-110 (1/2)
Q751-2 STK401-110 (2/2)
IDOL CURRENT
IDOL CURRENT

NJM7815FA Q801 15V
NJM7915FA Q802 -15V

TA7317P

+49V
-49V
+15V
-15V
49V

L
R

POWER
DC SUPPLY

W801
W802
J801
J802
J711
J753
JW52
JW51

L-CH
G
G
R-CH
FRONT CH SPEAKER
CENTER-CH SPEAKER
L-CH
G
G
R-CH
REAR CH SPEAKER

LN01 VB24MBU
LN51 VB24MBU

GND
POWER
DC SUPP.
GND
POWER

L001
POWER TRANSFORMER FOR /02./05 VERSION

230V FOR /02 VER.
240V FOR /05 VER.

BROWN
BLUE

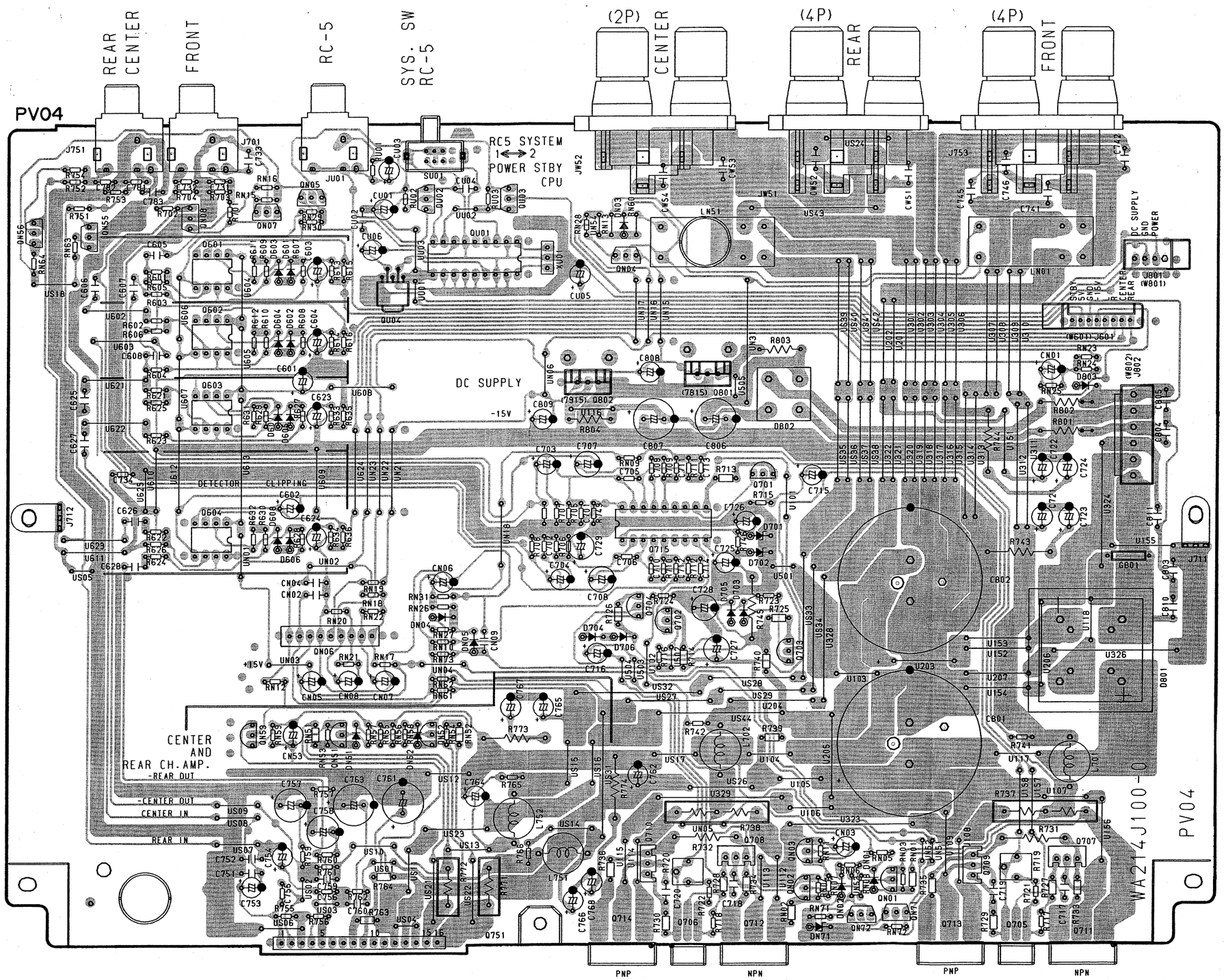
ORG
WHT
ORG
NOT USED
YEL
BLK
YEL
NOT USED

PB04 (RBU)(BUCK UP PCB)

TABLE 1 SYMB	/02 & KS	/05	U	K
RB01 RB02	220HMS	470HMS	470HMS	470HMS
FB01	T2.5A 250V	T2.5A 250V	5A 125V	SHUNTED
UB02	ADOPTED	ADOPTED	ADOPTED	NONE
UB03	NONE	NONE	NONE	ADOPTED
SB01	NONE	NONE	NONE	ADOPTED
MAINS VOLT-AGE	230VAC	240VAC	120VAC	220VAC

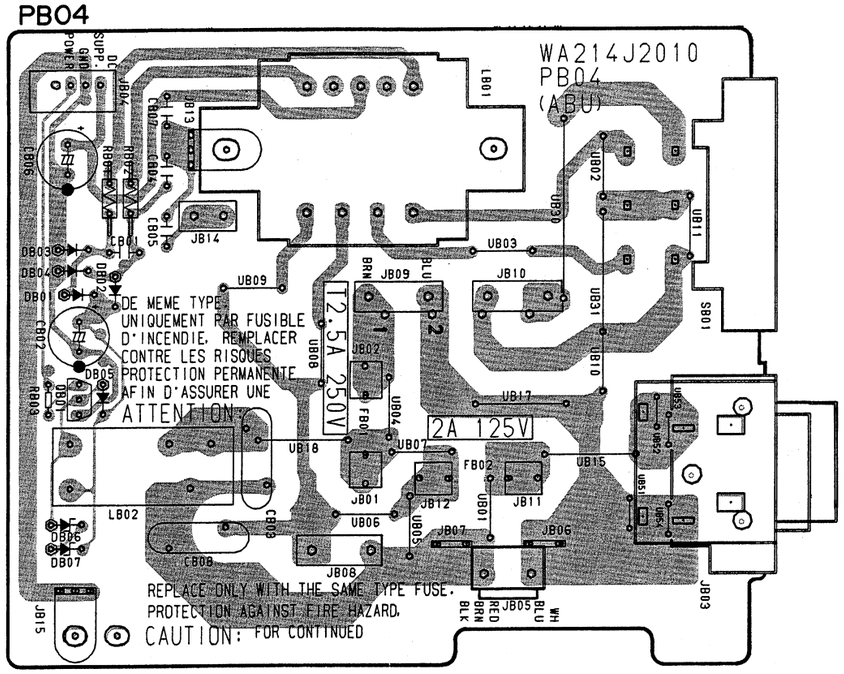
UNSWITCHED AC.OUTLET
NOTE: AC OUTLET IS NOT EQUIP TO /05 VER.
PIN NO. IN 0 FOR K.VER.
(SHUNTED BY UB04) K VER. ONLY
220V SB01 K VER. ONLY
110V
AC 230V 50HZ
MAINS FOR /02. OR KS VERSION

QN56 QN55 Q601～Q604 QN07 QN08 QN05 QN53 QN06 QN51 QU04 QU02 QU01 QU03 QN52 Q751 Q802 QN04 Q715 Q801 Q701～Q704 Q714 Q710 Q706 Q708 Q712 QN01～QN03 QN72 QN71 Q713 Q709 Q705 Q707 Q711

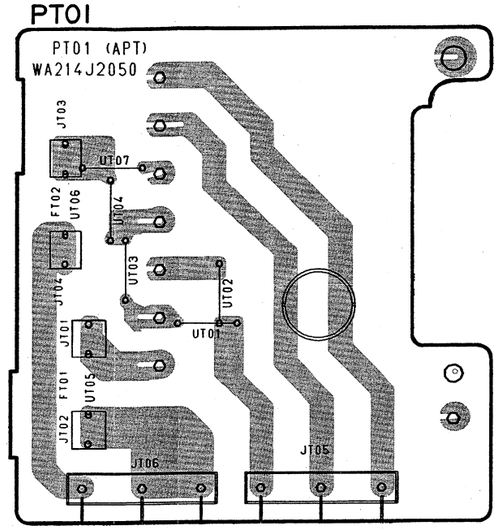


QB01

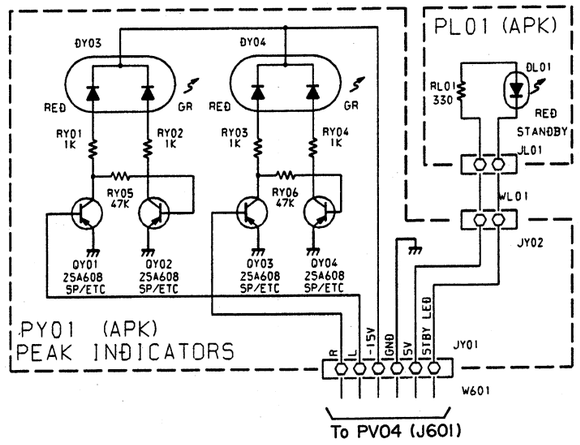
PB04



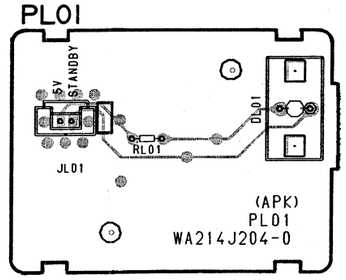
PT01



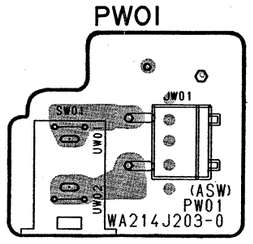
SM500



PL01

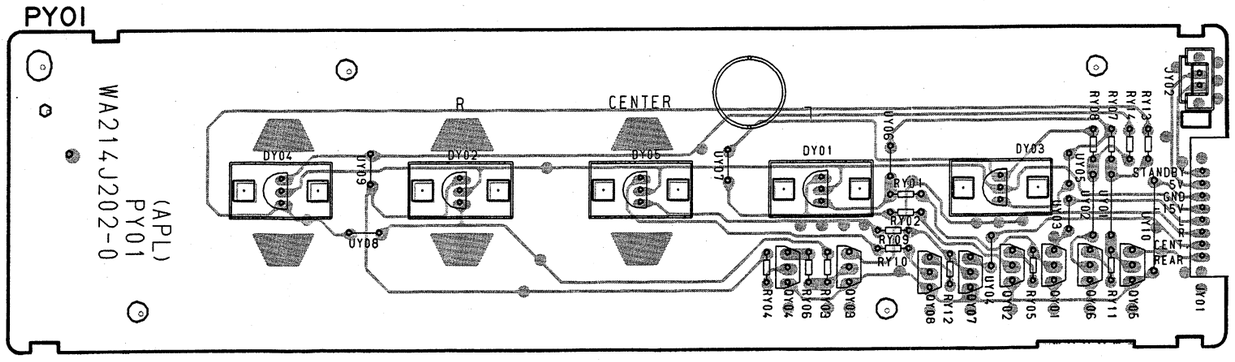


PW01

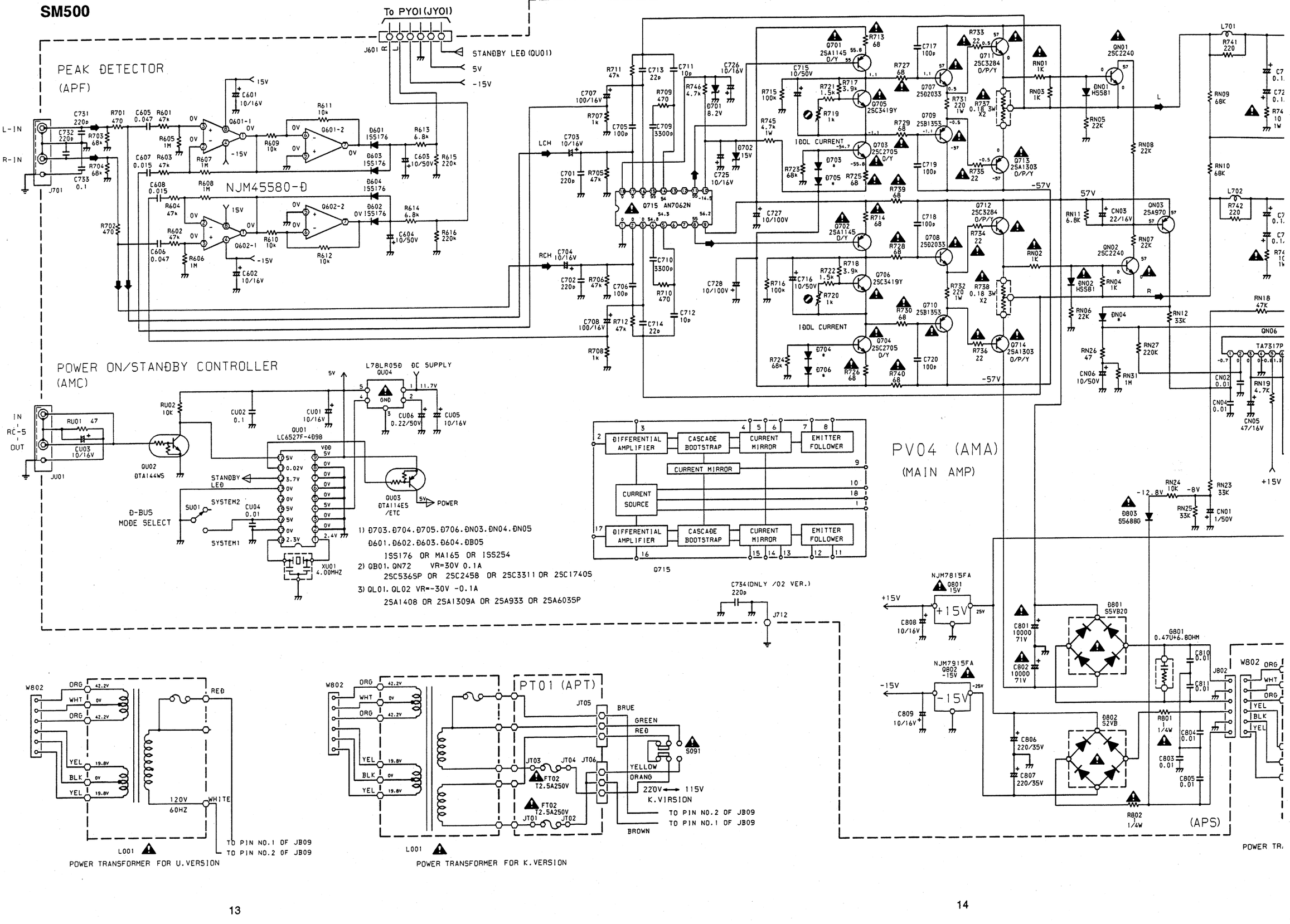


QY04 QY03 QY08 QY07 QY02 QY01 QY06 QY05

PY01



SM500


To PY01(JY01)
J601
STANDBY LED (QU01)
5V
-15V
PEAK DETECTOR
(APF)
L-IN
R-IN
J701
NJM45580-D
Q601-1
Q601-2
Q602-1
Q602-2
D601 1SS176
D602 1SS176
D603 1SS176
D604 1SS176
LCH
RCH
Q715 AN7062N
IDDL CURRENT
Q701 2SA1145 O/Y
Q702 2SA1145 O/Y
Q703 2SC2705 O/Y
Q704 2SC2705 O/Y
Q705 2SC3419Y
Q706 2SC3419Y
Q707 2SD2033
Q708 2SD2033
Q709 2SB1353
Q710 2SB1353
Q711 2SC3284 O/P/Y
Q712 2SC3284 O/P/Y
Q713 2SA1303 O/P/Y
Q714 2SA1303 O/P/Y
-57V
57V
QN01 2SC2240
QN02 2SC2240
QN03 2SA970
QN04
QN06
TA7317P
L701
L702
L
R
+15V
POWER ON/STANDBY CONTROLLER
(AMC)
L78LR05D DC SUPPLY
QU04
QU01 LC6527F-4D98
QU02 DTA144WS
QU03 DTA114ES /ETC
STANDBY LED
SYSTEM2
SYSTEM1
D-BUS MODE SELECT
SU01
XU01 4.00MHZ
JU01
1) D703.D704.D705.D706.DN03.DN04.DN05
D601.D602.D603.D604.DB05
1SS176 OR MA165 OR 1SS254
2) QB01. QN72 VR=30V 0.1A
2SC5364SP OR 2SC2458 OR 2SC3311 OR 2SC1740S
3) QL01. QL02 VR=-30V -0.1A
2SA1408 OR 2SA1309A OR 2SA933 OR 2SA603SP
DIFFERENTIAL AMPLIFIER
CASCADE BOOTSTRAP
CURRENT MIRROR
EMITTER FOLLOWER
CURRENT SOURCE
Q715
PV04 (AMA)
(MAIN AMP)
C734(ONLY /02 VER.)
J712
NJM7815FA
NJM7915FA
D801 S5VB20
D802 S2VB
(APS)
W802
PT01 (APT)
JT05
BRUE
GREEN
RED
YELLOW
ORANG
BROWN
220V ↔ 115V
K.VIRSION
TO PIN NO.2 OF JB09
TO PIN NO.1 OF JB09
POWER TRANSFORMER FOR U.VERSION
POWER TRANSFORMER FOR K.VERSION

STANDBY LED (QU01)
5V
-15V

LCH
RCH

Q715 AN7062N

PV04 (AMA)
(MAIN AMP)

IDOL CURRENT
IDOL CURRENT

-57V
57V
-57V

L
R

DIFFERENTIAL AMPLIFIER
CASCADE BOOTSTRAP
CURRENT MIRROR
EMITTER FOLLOWER
CURRENT MIRROR
CURRENT SOURCE
DIFFERENTIAL AMPLIFIER
CASCADE BOOTSTRAP
CURRENT MIRROR
EMITTER FOLLOWER

Q715

TA7317P

QN06

POWER ON/OFF DIRECT CIRCUIT
MUTING CIRCUIT
CONSTANT VOLTAGE CIRCUIT
OVER CURRENT DIRECT CIRCUIT
OR CIRCUIT
SCHMIDT CIRCUIT
RELAY DRIVE CIRCUIT
DC VOLTAGE DIRECT CIRCUIT
DISCHARGE CIRCUIT
SUBSTRATE
GND

L-CH
G
G
R-CH
SPEAKER

+15V
-15V

NJM7815FA
NJM7915FA

PT01 (APT)
JT05
BRUE
GREEN
RED
YELLOW
ORANG
220V ⟷ 115V
K.VIRSION
TO PIN NO.2 OF JB09
TO PIN NO.1 OF JB09
BROWN
FT02 T2.5A250V
S091

ORMER FOR K.VERSION

(APS)

W802 ORG WHT ORG YEL BLK YEL
42.2V 0V 42.2V 19.8V 0V 19.8V
BROWN
230V
BLUE
240V FOR /05 VER.

L001
POWER TRANSFORMER FOR /02./05 OR KS VERSION

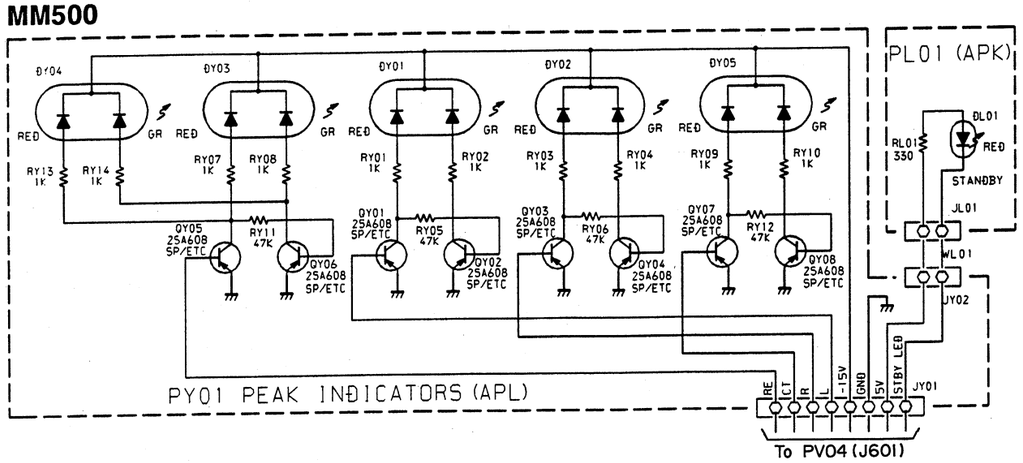
PB04 (RBU)(BUCK UP PCB)

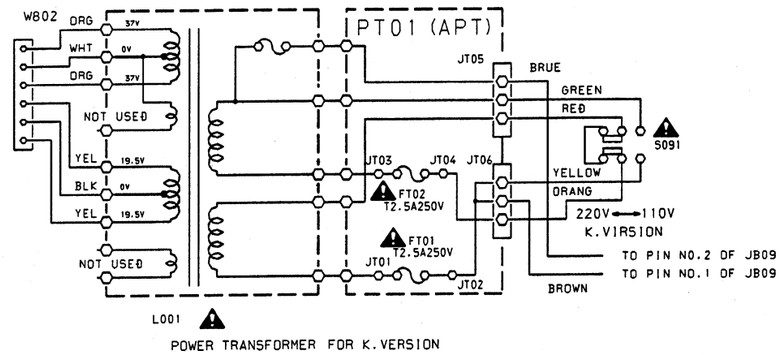
TABLE 1

	VERSIONS /02 & KS	/05	U	K
RB01 RB02	220HMS	470HMS	470HMS	470HMS
FB01	T2.5A 250V	T2.5A 250V	5A 125V	SHUNTED
UB02	ADOPTED	ADOPTED	ADOPTED	NONE
UB03	NONE	NONE	NONE	ADOPTED
SB01	NONE	NONE	NONE	ADOPTED
MAINS VOLTAGES	230VAC	240VAC	120VAC	220VAC

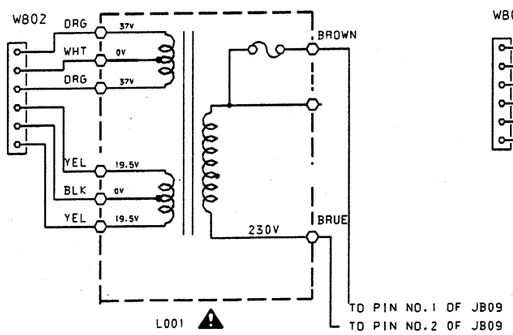
POWER
DC SUPPLY
DC SUPP.
GND
POWER
11.7V
PIN NO. IN ( ) FOR K. VER.
NOTE: AC OUTLET IS NOT EQUIP TO /05 VER.
UNSWITCHED AC.OUTLET
110V
220V
SB01 K VER. ONLY
(SHUNTED BY UB04) K VER. ONLY
AC 230V 50Hz
MAINS FOR /02. OR KS VERSION

MM500

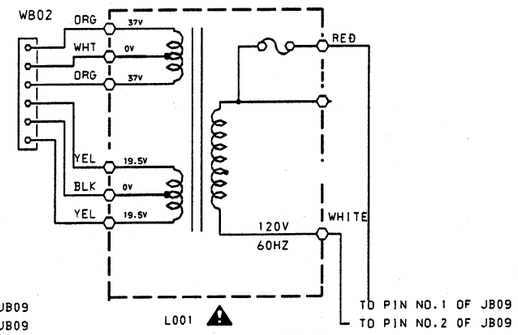




POWER TRANSFORMER FOR K.VERSION

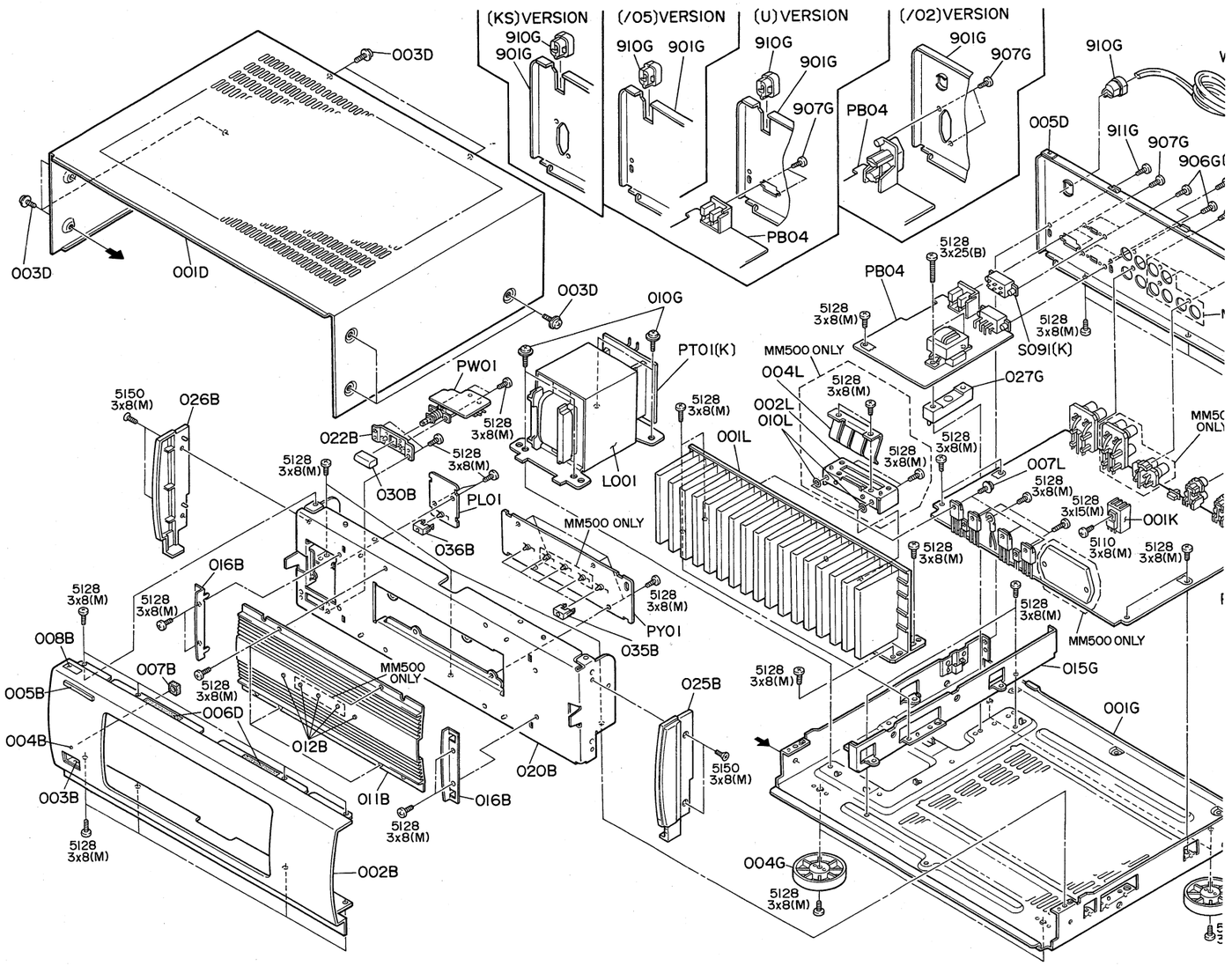


POWER TRANSFORMER FOR KS.VERSION

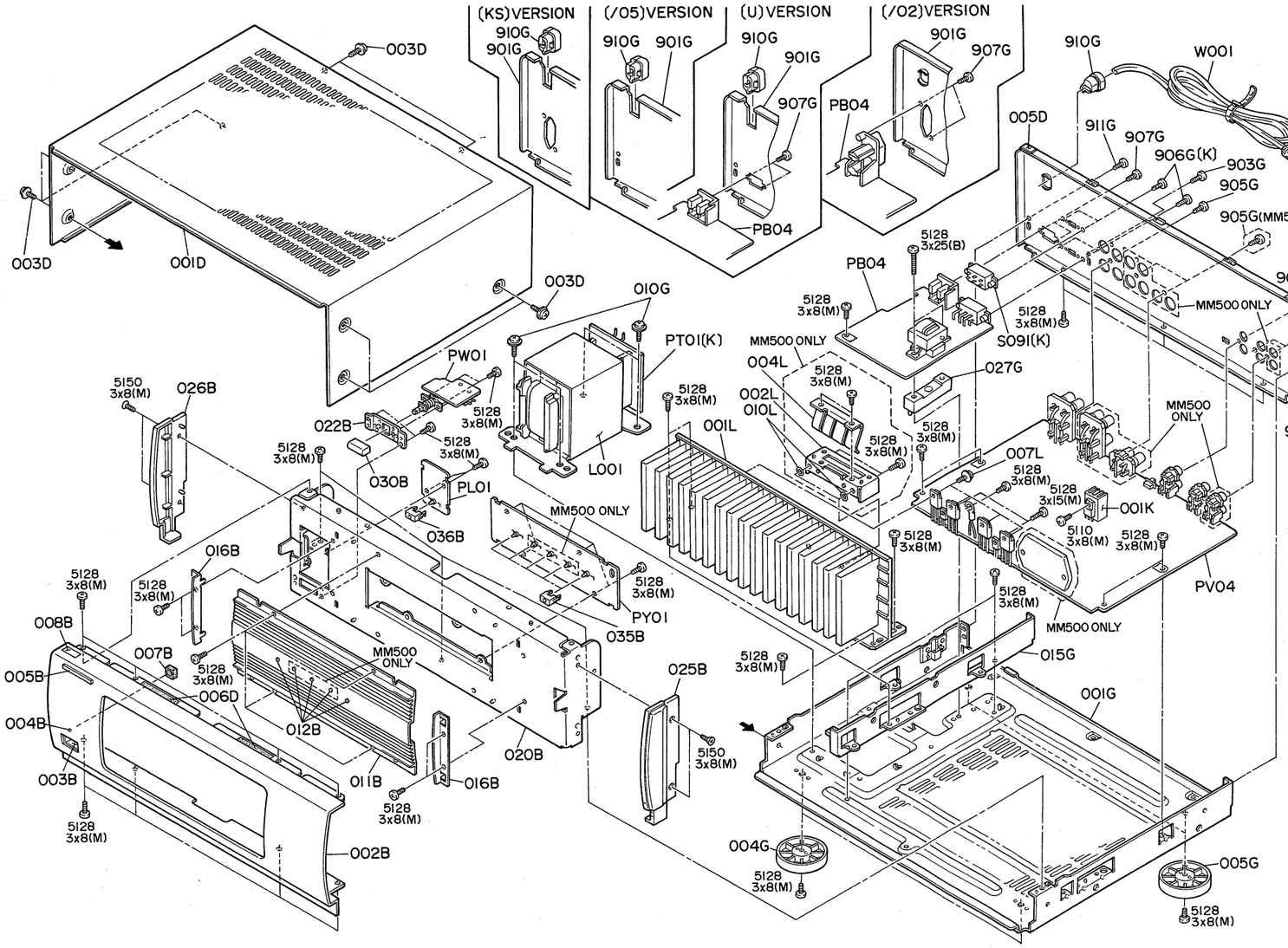


POWER TRANSFORMER FOR U.VERSION

7. EXPLODED VIEW AND PARTS LIST



7. EXPLODED VIEW AND PARTS LIST



JB09
JB09

(U : U.S.A., K : FAR EAST, F : JAPAN, EUROPE : /XXX)

POS.NO	VERSION OR COLOR	PART NO. (FOR EUROPE)	DESCRIPTION	PART NO. (FOR U,K,KS)
002B	BLACK	4822 426 51776	FRONT PANEL (BLK) [MM500]	214J248010
002B	GOLD	4822 426 51778	FRONT PANEL (GLD) [MM500]	214J248110
002B	BLACK	4822 426 51777	FRONT PANEL (BLK) [SM500]	214J248020
002B	GOLD	4822 426 51779	FRONT PANEL (GLD) [SM500]	214J248120
003B	BLACK	4822 532 12297	POWER BUTTON BUSH (BLK)	214J259010
003B	GOLD	4822 532 12298	POWER BUTTON BUSH (GLD)	214J259110
004B		4822 381 11564	STADBY LENS	194J355130
005B	BLACK	4822 459 11172	BADGE (BLK)	185J251010
005B	GOLD	4822 459 11173	BADGE (GLD)	185J251110
011B	BLACK	4822 454 12951	ESCUTCHEON (BLK) [MM500]	214J063010
011B	GOLD	4822 454 12953	ESCUTCHEON (GLD) [MM500]	214J063110
011B	BLACK	4822 454 12952	ESCUTCHEON (BLK) [SM500]	214J063020
011B	GOLD	4822 454 12954	ESCUTCHEON (GLD) [SM500]	214J063120
012B		4822 381 11564	INDICATOR LENS	194J355130
025B	BLACK		CAP, SIDE (R) (BLK)	214J067010
025B	GOLD		CAP, SIDE (R) (GLD)	214J067110
026B	BLACK		CAP, SIDE (L) (BLK)	214J067020
026B	GOLD		CAP, SIDE (L) (GLD)	214J067120
030B	BLACK	4822 410 62744	POWER BUTTON (BLK)	285K270010
030B	GOLD	4822 410 62745	POWER BUTTON (GLD)	285K270110
035B			REFLECTOR, LED	214J274010
036B			REFLECTOR, LED	214J274010
001D	BLACK		LID, TOP COVER (BLK)	183J257110
001D	GOLD		LID, TOP COVER (GLD)	183J257020
003D		4822 502 12511	B.T.SCREW (W/W) M3 x 8	51260308M0
004G		4822 462 42045	LEG, FRONT	183J057010
005G		4822 462 42048	LEG, REAR	183J057110
010G			SCREW	216J010010
903G ~ 907G			PH.TAP. SCREW M3 x 8	51270308M0
910G	/02	4822 325 50202	AC CORD BUSH	1455259020
910G	/05/U/KS	4822 532 60948	AC CORD BUSH	450H259010
910G	K		AC CORD BUSH	450H259210
911G			PH.TAP. SCREW M3 x 8	51270308M0
006L		4822 502 13851	B.T.SCREW (W/W) M3 x 15	51260315M0
007L		4822 502 13851	B.T.SCREW (W/W) M3 x 15	51260315M0
010L		4822 532 21181	FLAT WASHER, P. [MM500]	54020301A0
⚠ L001	/02/05	4822 146 21786	POWER TRANSF. [MM500]	
⚠ L001	U		POWER TRANSF. [MM500]	TS18626170
⚠ L001	K		POWER TRANSF. [MM500]	TS18626080
⚠ L001	KS		POWER TRANSF. [MM500]	TS18626160
⚠ L001	/02/05/KS	4822 146 31419	POWER TRANSF. [SM500]	TS18626090
⚠ L001	U		POWER TRANSF. [SM500]	TS18626110
⚠ L001	K		POWER TRANSF. [SM500]	TS18626100
⚠ S091	K		SLIDE SW, VOLTAGE SELECTOR	SS02021290
⚠ W001	K		A.C. POWER CORD	YC01800450
⚠ W001	KS		A.C. POWER CORD	YC01800340
⚠ W001	U		A.C. POWER CORD	YC01800330
Z001		4822 321 62012	CONN. CORD	ZD00900100
Z002	K		PLUG ADAPTOR	YJ04001240
001T	/02/05/K/KS	4822 736 22224	USER MANUAL	214J851310
001T	U		USER MANUAL	214J851250

8. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR

R＊＊＊ : 1) GD05 x x x 140, Carbon film fixed resistor, ±5% 1/4W
R＊＊＊ : 2) GD05 x x x 160, Carbon film fixed resistor, ±5% 1/6W

(1) —— Resistance value

Examples ;

(1) Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MΩ...475

(Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C＊＊＊ : CERAMIC CAP.

1) DD1x x x x 370, Ceramic capacitor
Disc type
Temp.coeff.P350~N1000,50V
(1) (2)
(2) —— Capacity value
(1) —— Tolerance

Examples

(1) Tolerance (Capacity deviation)
± 0.25pF ... 0
± 0.5pF ... 1
± 5% ... 5

＊ Tolerance of COMMON PARTS handled here are as follows :
0.5pF~ 5pF...± 0.25pF
6pF~ 10pF...± 0.5pF
12pF~ 560pF...± 5%

(2) Capacity value

0.5pF...005	3pF...030	100pF...101
1pF...010	10pF...100	220pF...221
1.5pF...015	47pF...470	560pF...561

C＊＊＊ : CERAMIC CAP.

1) DK16 x x x 300, High dielectric constant ceramic capacitor
(1) Disc type
Temp.chara. 2B4, 50V
(1) —— Capacity value

Examples

(2) Capacity value

100pF...101	1000pF...102	10000pF...103
470pF...471	2200pF...222	

C＊＊＊ : ELECTROLY CAP.(⧺), FILM CAP.(⧦)

1) EA x x x x x x 10, Electrolytic capacitor
One-way lead type, Tolerance ± 20%
(1) (2)
(2) —— Working voltage
(1) —— Capacity value

Examples

(1) Capacity value

0.1μF...104	4.7μF...475	100μF...107
0.33μF...334	10μF...106	330μF...337
1μF...105	22μF...226	1100μF...118
		2200μF...228

(2) Working voltage

6.3V...006	25V...025	
10V...010	35V...035	
16V...016	50V...050	

2) DF15 x x x 350 } Plastic film capacitor
DF15 x x x 310 } One-way type, Mylar ± 5% 50V
DF16 x x x 310 Plastic film capacitor
One-way type, Mylar ± 10% 50V
(1)
(1) —— Capacity value

Examples

(1) Capacity value

0.001μF(1000pF)...102	0.1μF...104
0.0018μF.....182	0.56μF...564
0.01μF.....103	1μF...105
0.015μF.....153	

NOTE : 1) The above CODES (R＊＊＊,R＊＊＊,C＊＊＊,C＊＊＊ and (C＊＊＊) are omitted on the schematic diagram in some case.
2) On the occasion, be confirmed the common parts on the parts list.
3) Refer to "Common Parts List" for the other common parts(**RI05, DD4, DK4**).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows ;

1. KOA Corporation

Part No.	Type No.	Description
NH05 x x x 140	RF25S x x x x Ω J	(± 5% 1/4W)
NH05 x x x 120	RF50S x x x x Ω J	(± 5% 1/2W)
NH85 x x x 110	RF73B2A x x x x Ω J	(± 5% 1/10W)
NH95 x x x 140	RF73B2E x x x x Ω J	(± 5% 1/4W)

＊ Resistance value — Resistance value (0.1-10kΩ)

2. Matsushita Electronic Components Co., Ltd

Part No.	Type No.	Description
NF05 x x x 140	ERD-2FCJ x x x	(± 5% 1/4W)
RF05 x x x 140		
NF02 x x x 140	ERD-2FCG x x x	(± 2% 1/4W)
RF02 x x x 140		

＊ Resistance value — ＊ Resistance value

Examples :

＊ Resistance value

0.1Ω...001	10Ω...100	1kΩ...102	100kΩ...104
0.5Ω...005	18Ω...180	2.7kΩ...272	680kΩ...684
1Ω...010	100Ω...101	10kΩ...103	1MΩ...105
6.8Ω...068	390Ω...391	22kΩ...223	4.7MΩ...475

ABBREVIATION AND MARKS

1	ANT.	: ANTENNA	2	BATT.	: BATTERY
3	CAP.	: CAPACITOR	4	CER.	: CERAMIC
5	CONN.	: CONNECTING	6	DIG.	: DIGITAL
7	HP	: HEADPHONE	8	MIC.	: MICROPHONE
9	μ-PRO	: MICROPROCESSOR	10	REC.	: RECORDING
11	RES.	: RESISTOR	12	SPK	: SPEAKER
13	SW	: SWITCH	14	TRANSF.	: TRANSFORMER
15	TRIM.	: TRIMMING	16	TRS.	: TRANSISTOR
17	VAR.	: VARIABLE	18	X'TAL	: CRYSTAL
19			20		
21			22		
23			24		
25			26		
27			28		
29			30		

NOTE ON SAFETY :

Symbol ⚠ Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol ⚠. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

[VERS. : VERSION. U : U.S.A. F : Japan, K : Far East, /XX : Europe]

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,KS)
			PB04-BACKUP TRANSF. / AC OUTLET CIRCUIT BOARD	
			PB04-CAPACITORS	
CB01		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
CB02		4822 124 90366	ELECT 220μ F 50V	OA22705020
CB03		4822 122 33276	CER. 0.01μ F ±20%	DK17103840
CB04		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
CB06		4822 124 90365	ELECT 220μ F 25V	OA22702520
CB08		4822 122 33276	CER. 0.01μ F ±20%	DK17103840
			PB04-RESISTORS	
RB01	/02/KS	4822 113 90119	22 Ω ±2% 1/4W, FUSE	NF02220140
RB01	/05/U/K	4822 111 90731	47 Ω ±2% 1/4W, FUSE	NF02470140
RB02	/02/KS	4822 113 90119	22 Ω ±2% 1/4W, FUSE	NF02220140
RB02	/05/U/K	4822 111 90731	47 Ω ±2% 1/4W, FUSE	NF02470140
			PB04-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W : RB03	
			PB04-SEMICONDUCTORS	
DB01 ~ DB04		4822 130 80839	DIODE S5688G	HD20029050
DB05		4822 130 33305	DIODE 1SS176, etc.	HD20002000
QB01		4822 130 42298	TRS. 2SC536SP, etc.	HT30001000
			PB04-MISCELLANEOUS	
⚠FB01	/02/05/KS	4822 253 40166	FUSE T2.5A 250V	FS10250850
⚠FB01	U		FUSE 5.0A 125V	FS10500350
⚠JB03	/02/KS	4822 267 31194	JACK, AC OUTLET	
⚠JB03	U/K		JACK, AC OUTLET	YJ04001780
⚠LB01	/02/05/KS	4822 146 30709	POWER TRANSF. BACKUP	TS13516020
⚠LB01	U		POWER TRANSF. BACKUP	TS13516080
⚠LB01	K		POWER TRANSF. BACKUP	TS13516060
⚠LB02		4822 280 20534	RELAY G5P-1 24V	LY10240220
⚠SB01	K		SLIDE SW, VOL.SEL [MM500]	SS02021510
⚠SB01	K		SLIDE SW, VOL.SEL [SM500]	SS02021240
			PL01-STANDBY LED CIRCUIT BOARD	
			PL01-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W : RL01	
DL01		4822 130 80326	L.E.D. LT3D8B (RED)	HI10062320
			PT01-FUSE CIRCUIT BOARD	
⚠FT01	K		FUSE T2.5A 250V	FS10250850
⚠FT02	K		FUSE T2.5A 250V	FS10250850
			PV04-POWER AMP. / POWER CLIPPING DETEC. CIRCUIT BOARD	
			PV04-CAPACITORS	
CN01		4822 124 41543	ELECT 1μ F 50V	OA10505020
CN02		4822 122 40586	CER. 0.01μ F ±20% 16V	DA17103110
CN03		4822 124 90358	ELECT 22 μF 16V	OA22601620
CN04		4822 122 40586	CER. 0.01μ F ±20% 16V	DA17103110
CN05		4822 124 41539	ELECT 47μF 16V	OA47601620
CN06		4822 124 22571	ELECT 10μF 50V	OA10605020
CN07		4822 124 90358	ELECT 22 μF 16V	OA22601620
CN08		4822 124 41543	ELECT 1 μF 50V	OA10505020
CN09		4822 122 30043	CER. 0.01 μF +80% -20% 50V	DK18103310
CN53		4822 124 90358	ELECT 22 μF 16V [MM500]	OA22601620

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,KS)
CU01		4822 124 90352	ELECT 10μ F 16V	OA10601620
CU02		4822 122 40617	CER. 0.1μ F +80% -20% 50V	DD38104010
CU03		4822 124 90352	ELECT 10μ F 16V	OA10601620
CU04		4822 122 40586	CER. 0.01μ F ±20% 16V	DA17103110
CU05		4822 124 90352	ELECT 10μ F 16V	OA10601620
CU06		4822 124 22703	ELECT 0.22μF 50V	OA22405020
CW51 ~ CW54	/02	4822 122 30043	CER. 0.01 μF +80% -20% 50V [MM500]	DA18103310
C601 ~ C604		4822 124 90352	ELECT 10μ F 16V	OA10601620
C623		4822 124 90352	ELECT 10μ F 16V [MM500]	OA10601620
C624		4822 124 90352	ELECT 10μ F 16V [MM500]	OA10601620
C701		4822 126 10408	CER. 220p F ±10% 50V	DA16221110
C702		4822 126 10408	CER. 220p F ±10% 50V	DA16221110
C703		4822 124 90352	ELECT 10μ F 16V	OA10601620
C704		4822 124 90352	ELECT 10μ F 16V	OA10601620
C705		4822 126 10364	CER. 100p F ±10% 50V	DA16101110
C706		4822 126 10364	CER. 100p F ±10% 50V	DA16101110
C707		4822 124 90354	ELECT 100μ F 16V	OA10701620
C708		4822 124 90354	ELECT 100μ F 16V	OA10701620
C709		4822 122 33794	CER. 3300p F ±20% 16V	DA17332110
C710		4822 122 33794	CER. 3300p F ±20% 16V	DA17332110
C711		4822 126 11125	CER. 10p F ±5% 50V	DA15100110
C712		4822 126 11125	CER. 10p F ±5% 50V	DA15100110
C713		4822 126 10362	CER. 22p F ±5% 50V	DA15220110
C714		4822 126 10362	CER. 22p F ±5% 50V	DA15220110
C715		4822 124 22571	ELECT 10μ F 50V [MM500]	OA10605020
C715		4822 124 90352	ELECT 10μ F 16V [SM500]	OA10601620
C716		4822 124 22571	ELECT 10μ F 50V [MM500]	OA10605020
C716		4822 124 90352	ELECT 10μ F 16V [SM500]	OA10601620
C717 ~ C720		4822 126 10364	CER. 100p F ±10% 50V	DA16101110
C721 ~ C724		4822 124 90351	ELECT 0.1μ F 50V	OA10405020
C725		4822 124 90352	ELECT 10μ F 16V	OA10601620
C726		4822 124 90352	ELECT 10μ F 16V	OA10601620
C727		4822 124 22693	ELECT 10μ F 63V [MM500]	OA10606320
C727		4822 124 23562	ELECT 10μ F 100V [SM500]	OA10610020
C728		4822 124 22693	ELECT 10μ F 63V [MM500]	OA10606320
C728		4822 124 23562	ELECT 10μ F 100V [SM500]	OA10610020
C731		4822 126 10408	CER. 220p F ±10% 50V	DA16221110
C732		4822 126 10408	CER. 220p F ±10% 50V	DA16221110
C733		4822 122 40617	CER. 0.1μ F +80% -20% 50V	DD38104010
C734	/02	4822 126 10408	CER. 220p F ±10% 50V	DA16221110
C741	/02	4822 122 30043	CER. 0.01 μF +80% -20% 50V	DK18103310
C742	/02	4822 122 30043	CER. 0.01 μF +80% -20% 50V	DK18103310
C745	/02	4822 122 30043	CER. 0.01 μF +80% -20% 50V	DK18103310
C746	/02	4822 122 30043	CER. 0.01 μF +80% -20% 50V	DK18103310
C751		4822 126 10408	CER. 220p F ±10% 50V [MM500]	DA16221110
C752		4822 126 10408	CER. 220p F ±10% 50V [MM500]	DA16221110
C753		4822 124 90352	ELECT 10μ F 16V [MM500]	OA10601620
C754		4822 124 90352	ELECT 10μ F 16V [MM500]	OA10601620
C755	/02	4822 126 10364	CER. 100p F ±10% 50V [MM500]	DA16101110
C756	/02	4822 126 10364	CER. 100p F ±10% 50V [MM500]	DA16101110
C757		4822 124 90354	ELECT 100μ F 16V [MM500]	OA10701620
C758		4822 124 90354	ELECT 100μ F 16V [MM500]	OA10701620
C759		4822 126 11126	CER. 5.6p F ±10% 50V [MM500]	DA16056110
C760		4822 126 11126	CER. 5.6p F ±10% 50V [MM500]	DA16056110
C761		4822 124 22572	ELECT 100μ F 63V [MM500]	OA10706320
C762		4822 124 22693	ELECT 10μ F 63V [MM500]	OA10606320
C763		4822 124 22572	ELECT 100μ F 63V [MM500]	OA10706320
C764		4822 124 22693	ELECT 10μ F 63V [MM500]	OA10606320

[VERS. : VERSION. U : U.S.A. F : Japan, K : Far East, /XX : Europe]

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,KS)
C765				
≀		4822 124 90351	ELECT 0.1μ F 50V [MM500]	OA10405020
C768				
C781		4822 126 10408	CER. 220p F ±10% 50V[MM500]	DA16221110
C782		4822 126 10408	CER. 220p F ±10% 50V[MM500]	DA16221110
C783		4822 122 40617	CER. 0.1μ F+80% -20% 50V [MM500]	DD38104010
▲C801	/02/05/U/K	4822 124 81011	ELECT 10000μ F 63V [MM500]	EB10906360
▲C801	KS	4822 124 23081	ELECT 15000μ F 56V [MM500]	EB15905610
▲C801		4822 124 23927	ELECT 10000μ F 71V [SM500]	EB10907140
▲C802	/02/05/U/K	4822 124 81011	ELECT 10000μ F 63V [MM500]	EB10906360
▲C802	KS	4822 124 23081	ELECT 15000μ F 56V [MM500]	EB15905610
▲C802		4822 124 23927	ELECT 10000μ F 71V [SM500]	EB10907140
C803		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
C804		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
C805		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
C806		4822 124 41538	ELECT 220μ F 35V	OA22703520
C807		4822 124 41538	ELECT 220μ F 35V	OA22703520
C808		4822 124 90352	ELECT 10μ F 16V	OA10601620
C809		4822 124 90352	ELECT 10μ F 16V	OA10601620
C810		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
C811		4822 122 30043	CER. 0.01μ F +80% -20% 50V	DK18103310
G801		4822 126 11235	CER.COMP 0.47μ F + 6.8 Ω	BF47400020
			PV04-CAPACITORS (COMMON)	
C***			PLASTIC FILM CAPACITOR,±5% 50V: C605~C608, (C625~C628 [MM500])	
			PV04-RESISTORS	
▲RN01		4822 052 10102	1K Ω ±5% 1/6W	GG05102160
▲RN02		4822 052 10102	1K Ω ±5% 1/6W	GG05102160
▲RN51		4822 052 10102	1K Ω ±5% 1/6W [MM500]	GG05102160
▲RN52		4822 052 10102	1K Ω ±5% 1/6W [MM500]	GG05102160
▲R713		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R714		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
R719		4822 100 11386	1K Ω TRIM.	RA01020780
R720		4822 100 11386	1K Ω TRIM.	RA01020780
▲R725				
≀		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R730				
R731		4822 053 10221	220 Ω ±5% 1W	GA05221010
R732		4822 053 10221	220 Ω ±5% 1W	GA05221010
▲R733				
≀		4822 052 10229	220 Ω ±5% 1/6W	GA05221060
▲R736				
▲R737		4822 116 82049	0.18 Ω x 2 3W	BZ10182010
▲R738		4822 116 82049	0.18 Ω x 2 3W	BZ10182010
▲R739		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R740		4822 050 26809	68 Ω ±5% 1/6W	GG05680160
▲R743		4822 053 10109	10 Ω ±5% 1W	GA05100010
▲R744		4822 053 10109	10 Ω ±5% 1W	GA05100010
▲R745		4822 053 10472	4.7K Ω ±5% 1W	GA05472010
▲R763		4822 052 10101	100 Ω ±5% 1/6W [MM500]	GG05101160
▲R764		4822 052 10101	100 Ω ±5% 1/6W [MM500]	GG05101160
▲R771		4822 113 80363	0.22 Ω ±10% 3W [MM500]	GO10222030
▲R772		4822 113 80363	0.22 Ω ±10% 3W [MM500]	GO10222030
▲R773		4822 053 10109	10 Ω ±5% 1W [MM500]	GA05100010
▲R774		4822 053 10109	10 Ω ±5% 1W [MM500]	GA05100010
▲R801		4822 116 60307	1 Ω ±5% 1/4W, FUSE	NH05010140
▲R802		4822 116 60307	1 Ω ±5% 1/4W, FUSE	NH05010140
			PV04-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W : RN03~RN12, RN17~RN27, RN31, (RN53~RN59, RN61, RN62 [MM500]) RN71~RN73, RU01, RU02, R601~R616 (R621~R636 [MM500])	

POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,KS)
			R701~R712, R715~R718, R721~R724, R741, R742, R746, (R751~R756, R759~R762, R765, R766 [MM500])	
			PV04-SEMICONDUCTORS	
DN01		4822 130 80837	DIODE HSS81TD	HD20027010
DN02		4822 130 80837	DIODE HSS81TD	HD20027010
DN03		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DN04		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DN05		4822 130 33305	DIODE 1SS176, etc.	HD20002000
DN51		4822 130 80837	DIODE HSS81TD [MM500]	HD20027010
DN52		4822 130 80837	DIODE HSS81TD [MM500]	HD20027010
DN71		4822 126 90009	VARISTOR [MM500]	HP00029230
DN71		4822 126 90007	VARISTOR [SM500]	HP00033240
D601				
≀		4822 130 33305	DIODE 1SS176, etc.	HD20002000
D604				
D605				
≀		4822 130 33305	DIODE 1SS176, etc. [MM500]	HD20002000
D608				
D701		4822 130 80273	ZENER 8.2V	HD30821000
D702		4822 130 80322	ZENER 15V	HD31501000
D703				
≀		4822 130 33305	DIODE 1SS176, etc.	HD20002000
D706				
▲D801		4822 130 30984	DIODE S5VB20 6A	HE20009290
▲D802		4822 130 33057	DIODE S2VB20 2A	HE20011290
▲D803		4822 130 80839	DIODE S5688G 1A	HE20029050
▲QN01		4822 130 43233	TRS. 2SC2240 (GR, BL)	HT322402A0
▲QN02		4822 130 43233	TRS. 2SC2240 (GR, BL)	HT322402A0
QN03		4822 130 42951	TRS. 2SA970 (GR, BL)	HT109702A0
QN06		4822 209 83312	IC TA7317P	HC10042050
▲QN51		4822 130 43233	TRS. 2SC2240(GR, BL)[MM500]	HT322402A0
▲QN52		4822 130 43233	TRS. 2SC2240(GR, BL)[MM500]	HT322402A0
QN53		4822 130 42951	TRS. 2SA970 (GR, BL)[MM500]	HT109702A0
QN71		4822 130 60766	TRS. DIG. DTA114ES/UN4111	BA10001000
QN72		4822 130 42298	TRS. 2SC536SP, etc.	HT30001000
QU01		4822 209 33814	μ-COM LC6527F-4D98	HU214JS000
QU02		4822 130 62797	TRS. DIG. DTC144WS	BA20041210
QU03		4822 130 60766	TRS. DIG. DTA114ES/UN4111	BA10001000
▲QU04		4822 209 32697	IC L78LR05	HC10317030
Q601		4822 209 83631	IC NJM4558D-D	HC10008090
Q602		4822 209 83631	IC NJM4558D-D	HC10008090
Q603		4822 209 83631	IC NJM4558D-D [MM500]	HC10008090
Q604		4822 209 83631	IC NJM4558D-D [MM500]	HC10008090
▲Q701		4822 130 42999	TRS. 2SA114555 (O, Y)	HT111452A0
▲Q702		4822 130 42999	TRS. 2SA114555 (O, Y)	HT111452A0
▲Q703		4822 130 43283	TRS. 2SC2705 (O, Y)	HT327052A0
▲Q704		4822 130 43283	TRS. 2SC2705 (O, Y)	HT327052A0
▲Q705		4822 130 60117	TRS. 2SC3419	HT334191Y0
▲Q706		4822 130 60117	TRS. 2SC3419	HT334191Y0
▲Q707		4822 130 62335	TRS. 2SD2033 (E)	HT420331E0
▲Q708		4822 130 62335	TRS. 2SD2033 (E)	HT420331E0
▲Q709		4822 130 62334	TRS. 2SB1353 (E)	HT213531E0
▲Q710		4822 130 62334	TRS. 2SB1353 (E)	HT213531E0
▲Q711		4822 130 63677	TRS. 2SC4468(O, P,Y) [MM500]	HT344683A0
▲Q711		4822 130 63676	TRS. 2SC3284(O, P,Y) [SM500]	HT332843A0
▲Q712		4822 130 63677	TRS. 2SC4468(O, P,Y) [MM500]	HT344683A0
▲Q712		4822 130 63676	TRS. 2SC3284(O, P,Y) [SM500]	HT332843A0
▲Q713		4822 130 63675	TRS. 2SA1695(O, P,Y) [MM500]	HT116953A0
▲Q713		4822 130 63674	TRS. 2SA1303(O, P,Y) [SM500]	HT113033A0
▲Q714		4822 130 63675	TRS. 2SA1695(O, P,Y) [MM500]	HT116953A0
▲Q714		4822 130 63674	TRS. 2SA1303(O, P,Y) [SM500]	HT113033A0
▲Q715		4822 209 83732	IC AN7062N	HC10066020
▲Q751		4822 209 32696	IC STK401-110 [MM500]	HC10312030

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POS. NO.	VER. COLOR	PART NO. (For Europe)	DESCRIPTION	PART NO. (For U,K,KS)
▲Q801		4822 209 83317	IC NJM7815FA	HC38915090
▲Q802		4822 209 31864	IC NJM7915FA	HC39915090
			PV04-MISCELLANEOUS	
JU01		4822 267 41009	TERMINAL, 2P RCA JACK	YT02020890
JW51		4822 290 61215	TERMINAL, 4P REAR SPK. [MM500]	YT01040630
JW52		4822 290 61219	TERMINAL, 2P CENTER SPK.[MM500]	YT01020220
J701		4822 290 61216	TERMINAL, 2P RCA JACK	YT02020950
J751		4822 290 61216	TERMINAL, 2P RCA JACK [MM500]	YT02020950
J753		4822 290 61215	TERMINAL, 4P SPK.	YT01040630
▲LN01		4822 280 70354	RELAY VB24MBU	LY20240310
▲LN51		4822 280 70354	RELAY VB24MBU [MM500]	LY20240310
L701		4822 157 70022	AIR COIL	ML08010030
L702		4822 157 70022	AIR COIL	ML08010030
L751		4822 157 70022	AIR COIL [MM500]	ML08010030
L752		4822 157 70022	AIR COIL [MM500]	ML08010030
SU01		4822 277 21712	SLIDE SW, MODE	SS02021470
XU01		4822 242 72527	CER. RESONATOR 4.00MHz	FQ04004030
			PW01-MAINS SWITCH CIRCUIT BOARD	
▲SW01		4822 276 11798	PUSH SW, POWER	SP01011030
			PY01-POWER CLIPPING IND. CIRCUIT BOARD	
			PY04-RESISTORS (COMMON)	
R***			CARBON FILM FIXED RESISTOR, ±5% 1/6W : RY01~RY06, (RY07~RY14 [MM500)	
			PY01-SEMICONDUCTORS	
DY01		4822 130 82159	L.E.D. GL3DE8 [MM500]	HI10099320
DY02		4822 130 82159	L.E.D. GL3DE8 [MM500]	HI10099320
DY03		4822 130 82159	L.E.D. GL3DE8	HI10099320
DY04		4822 130 82159	L.E.D. GL3DE8	HI10099320
DY05		4822 130 82159	L.E.D. GL3DE8 [MM500]	HI10099320
QY01 ~ QY04		4822 130 42715	TRS. 2SA608SP, etc.	HT10001000
QY05 ~ QY08		4822 130 42715	TRS. 2SA608SP, etc. [MM500]	HT10001000

NOTE ON SAFETY:

Symbol ▲ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol ▲. Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.